BRUHAT BANGALORE MAHANAGARA PALIKE

MEASUREMENT SHEET

RA 1ST AND FINAL BILL

Name of work: Improvements to Roads and Drains and Providing Covering Slabs at Ramachandrapura, Devappa Layout, Kalathur Layout, Mariyamma Block and Surrounding areas in Ward No. 11 (Kuvempunagara) in Vidyaranyapura Sub Division.

Estimated Cost : Rs. 30.00 Lakhs

Job Code: 011-20-000119

Head of Account : P-3726 Zonal Public Works

Name of Agency: Sri M.S Raju, # 18, 2nd Main, Amarajothi Layout, Cholanayakanahalli, RT Nagar, Bangalore – 560032.

Work order No: EE/BTP/BBMP/E-PMT/01(41733)/119/2020-21 D: 25-09-2020.

Measurements Recarded on : 21-10-2020

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications.								
		Cum							
	Qty as per Premeasurement Recorded vide E-Bill Page No. 1 & 2 is =						**278.33**	224.00	**62346.00**
2	Removing and refixing stone slabs of drains and pointing in CM (1:3)								
		Sqm							
	Qty as per Premeasurement Recorded vide E-Bill Page No. 3 is =						**931.50**	102.00	**95013.00**
3	Providing granite slabs of selected quality roughly dressed having a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete								
	2nd Main Kalathur Layout N/S	Sqm	1	3.00		1.35	4.05		
			1	5.00		1.35	6.75		
	2nd Main Kalathur Layout S/S		1	6.00		1.35	8.10		
			1	3.00		1.35	4.05		
	3rd Main Kalathur Layout N/S		1	5.00		1.35	6.75		
			1	6.00		1.35	8.10		
			1	2.00		1.35	2.70		
	3rd Main Kalathur Layout S/S		1	4.00		1.35	5.40		
			1	3.00		1.35	4.05		
			1	5.00		1.35	6.75		
			1	6.00		1.35	8.10		
	4th Main Kalathur Layout N/S		1	2.00		1.35	2.70		
			1	3.00		1.35	4.05		
			1	2.50		1.35	3.38		
	4th Main Kalathur Layout S/S		1	5.00		1.35	6.75		
			1	3.00		1.35	4.05		
			1	6.00		1.35	8.10		

C & F

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore-97
21/10

M.S. Raju

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
					Total Qty =		93.83		
					Qty Limited to =		93.15	682.00	63528.00

Assistant Engineer
Ward No. 11

Assistant Executive Engineer
Vidyaranyapura Sub Division

	Measurements Continued on :	27-10-2020							
4	Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications.								
	Flagging Course	Sqm							
	2nd Main Kalathur Layout N/S		2	30.00		0.40	24.00		
			2	30.00		0.40	24.00		
			2	25.10		0.40	20.08		
	2nd Main Kalathur Layout S/S		2	30.00		0.40	24.00		
			2	30.00		0.40	24.00		
			2	25.30		0.40	20.24		
	3rd Main Kalathur Layout N/S		2	30.00		0.40	24.00		
			2	30.00		0.40	24.00		
			2	15.30		0.40	12.24		
	3rd Main Kalathur Layout S/S		2	30.00		0.40	24.00		
			2	30.00		0.40	24.00		
			2	15.10		0.40	12.08		
	4th Main Kalathur Layout N/S		2	30.00		0.40	24.00		
			2	30.00		0.40	24.00		
			2	5.50		0.40	4.40		
			2	28.50		0.40	22.80		
			2	28.20		0.40	22.56		
			2	29.20		0.40	23.36		
			2	30.00		0.40	24.00		
			2	3.20		0.40	2.56		
	4th Main Kalathur Layout S/S		2	30.00		0.40	24.00		
			2	30.00		0.40	24.00		
			2	5.50		0.40	4.40		
			2	28.50		0.40	22.80		
			2	28.20		0.40	22.56		
			2	29.30		0.40	23.44		
			2	30.00		0.40	24.00		
			2	3.30		0.40	2.64		
					Total Qty =		552.16		
					Qty Limited to =		552.00	900.00	496800.00

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore-97

Assistant Engineer
Ward No. 11

Assistant Executive Engineer
Vidyaranyapura Sub Division

mr. S. Ragu

No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Measurements Continued on :	29-10-2020							
5	Providing and laying Plain cement concrete of mix 1:3:6 with with OPC cement @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.84cum and fine aggregates @ 0.56cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days complete as per specifications								
		Cum							
	Qty as per Premeasurement Recorded vide E-Bill Page No. 4 is =						**1.80**	4987.00	**8977.00**
6	Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.							Cum	
	Bed Concrete	Cum							
	3rd main Road Kalathur Layout		2	6.00	0.60	0.90	6.48		
					Total Qty		**6.48**		
					Qty Limited to =		**6.48**	5346.00	**34642.00**

Assistant Engineer
Ward No. 11

Assistant Executive Engineer
Vidyaranyapura Sub Division

	Measurements Continued on :	29-10-2020							
7	Providing ruled pointing 20 mm deep to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications.							Sqm	
	Pointing	Cum							
	3rd main Road Kalathur Layout		2	6.00		0.90	10.80		
					Total Qty		**10.80**		
					Qty Limited to =		**10.80**	138.00	**1490.00**

Assistant Engineer
Ward No. 11

Assistant Executive Engineer
Vidyaranyapura Sub Division

	Measurements Continued on :	05-11-2020							
8	Providing **precast slab of 250mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc.,complete as per the direction of engineer in charge - (Data rate Approved).							Sqm	
	Deck Slab	Cum							
	3rd main Road Kalathur Layout		10	1.50	0.60		9.00		
					Total Qty		**9.00**		
					Qty Limited to =		**9.00**	4984.00	**44856.00**

Assistant Engineer
Ward No. 11

Assistant Executive Engineer
Vidyaranyapura Sub Division

	Measurements Continued on :	05-11-2020							
9	Providing **precast slab of 100 mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge.								
	Covering Slab	Sqm							

M. S. Raju

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	2nd Main Kalathur Layout N/S		1	30.00	0.90		27.00		
			1	30.00	0.90		27.00		
			1	25.10	0.90		22.59		
	2nd Main Kalathur Layout S/S		1	30.00	0.90		27.00		
			1	30.00	0.90		27.00		
			1	25.30	0.90		22.77		
	3rd Main Kalathur Layout N/S		1	30.00	0.90		27.00		
			1	30.00	0.90		27.00		
			1	15.30	0.90		13.77		
	3rd Main Kalathur Layout S/S		1	30.00	0.90		27.00		
			1	30.00	0.90		27.00		
			1	15.10	0.90		13.59		
	4th Main Kalathur Layout N/S		1	30.00	0.90		27.00		
			1	30.00	0.90		27.00		
			1	5.50	0.90		4.95		
			1	28.50	0.90		25.65		
			1	28.20	0.90		25.38		
			1	29.20	0.90		26.28		
			1	30.00	0.90		27.00		
			1	3.20	0.90		2.88		
	4th Main Kalathur Layout S/S		1	30.00	0.90		27.00		
			1	30.00	0.90		27.00		
			1	5.50	0.90		4.95		
			1	28.50	0.90		25.65		
			1	28.20	0.90		25.38		
			1	29.30	0.90		26.37		
			1	30.00	0.90		27.00		
			1	3.30	0.90		2.97		
				Total Qty =			**621.18**		
				Qty Limited to =			**621.00**	2150.00	**1335150.00**

Assistant Engineer
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Assistant Executive Engineer
Vidyaranyapura Sub Division

	Measurements Continued on :	11-11-2020							
10	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM of machinery, curing complete as per specifications.								
	Culvert Coping	Cum							
	3rd main Road Kalathur Layout		1	6.00	1.50	0.10	0.90		
	Ramp		2	6.00	1.00	0.15	1.80		
	Bed Concrete								
	2nd Main Kalathur Layout N/S		1	8.00	0.45	0.10	0.36		
			1	10.00	0.45	0.10	0.45		
			1	12.00	0.45	0.10	0.54		
	2nd Main Kalathur Layout S/S		1	5.00	0.45	0.10	0.23		
			1	12.00	0.45	0.10	0.54		

No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
			1	5.00	0.45	0.10	0.23		
	3rd Main Kalathur Layout N/S		1	8.00	0.45	0.10	0.36		
			1	9.50	0.45	0.10	0.43		
			1	10.00	0.45	0.10	0.45		
	3rd Main Kalathur Layout S/S		1	12.60	0.45	0.10	0.57		
			1	10.20	0.45	0.10	0.46		
			1	9.50	0.45	0.10	0.43		
	4th Main Kalathur Layout N/S		1	10.60	0.45	0.10	0.48		
			1	13.20	0.45	0.10	0.59		
			1	12.00	0.45	0.10	0.54		
			1	10.80	0.45	0.10	0.49		
			1	12.00	0.45	0.10	0.54		
			1	10.00	0.45	0.10	0.45		
			1	12.80	0.45	0.10	0.58		
			1	3.20	0.45	0.10	0.14		
	4th Main Kalathur Layout S/S		1	10.00	0.45	0.10	0.45		
			1	8.60	0.45	0.10	0.39		
			1	5.00	0.45	0.10	0.23		
			1	12.20	0.45	0.10	0.55		
			1	5.50	0.45	0.10	0.25		
			1	8.20	0.45	0.10	0.37		
			1	16.00	0.45	0.10	0.72		
			1	3.30	0.45	0.10	0.15		
	Coping Concrete								
	2nd Main Kalathur Layout N/S		2	30.00	0.20	0.10	1.20		
			2	30.00	0.20	0.10	1.20		
			2	25.10	0.20	0.10	1.00		
	2nd Main Kalathur Layout S/S		2	30.00	0.20	0.10	1.20		
			2	30.00	0.20	0.10	1.20		
			2	25.30	0.20	0.10	1.01		
	3rd Main Kalathur Layout N/S		2	30.00	0.20	0.10	1.20		
			2	30.00	0.20	0.10	1.20		
			2	15.30	0.20	0.10	0.61		
	3rd Main Kalathur Layout S/S		2	30.00	0.20	0.10	1.20		
			2	30.00	0.20	0.10	1.20		
			2	15.10	0.20	0.10	0.60		
	4th Main Kalathur Layout N/S		2	30.00	0.20	0.10	1.20		
			2	30.00	0.20	0.10	1.20		
			2	5.50	0.20	0.10	0.22		
			2	28.50	0.20	0.10	1.14		
			2	28.20	0.20	0.10	1.13		
			2	29.20	0.20	0.10	1.17		
			2	30.00	0.20	0.10	1.20		
			2	3.20	0.20	0.10	0.13		
	4th Main Kalathur Layout S/S		2	30.00	0.20	0.10	1.20		
			2	30.00	0.20	0.10	1.20		
			2	5.50	0.20	0.10	0.22		
			2	28.50	0.20	0.10	1.14		
			2	28.20	0.20	0.10	1.13		

Assistant Executive Engineer
Kathiranyappa Sub Division
BBMP, Bangalore - 97

M.S. Raji

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
			2	29.30	0.20	0.10	1.17		
			2	30.00	0.20	0.10	1.20		
			2	3.30	0.20	0.10	0.13		
	Ramp								
	2nd Main Kalathur Layout N/S		1	30.00	0.30	0.10	0.90		
			1	30.00	0.30	0.10	0.90		
			1	25.10	0.30	0.10	0.75		
	2nd Main Kalathur Layout S/S		1	30.00	0.30	0.10	0.90		
			1	30.00	0.30	0.10	0.90		
			1	25.30	0.30	0.10	0.76		
	3rd Main Kalathur Layout N/S		1	30.00	0.30	0.10	0.90		
			1	30.00	0.30	0.10	0.90		
			1	15.30	0.30	0.10	0.46		
	3rd Main Kalathur Layout S/S		1	30.00	0.30	0.10	0.90		
			1	30.00	0.30	0.10	0.90		
			1	15.10	0.30	0.10	0.45		
	4th Main Kalathur Layout N/S		1	30.00	0.30	0.10	0.90		
			1	30.00	0.30	0.10	0.90		
			1	5.50	0.30	0.10	0.17		
			1	28.50	0.30	0.10	0.86		
			1	28.20	0.30	0.10	0.85		
			1	29.20	0.30	0.10	0.88		
			1	30.00	0.30	0.10	0.90		
			1	3.20	0.30	0.10	0.10		
	4th Main Kalathur Layout S/S		1	30.00	0.30	0.10	0.90		
			1	30.00	0.30	0.10	0.90		
			1	5.50	0.30	0.10	0.17		
			1	28.50	0.30	0.10	0.86		
			1	28.20	0.30	0.10	0.85		
			1	29.30	0.30	0.10	0.88		
			1	30.00	0.30	0.10	0.90		
				Total Qty =			**62.85**		
				Qty Limited to =			**62.05**	5151.00	**319620.00**
	Sub Total								**2462422.00**
	GST @ 12%								**295491.00**
								Total	**2757913.00**

Assistant Engineer
Ward No. 11

Assistant Executive Engineer
Vidyaranyapura Sub Division